

Lobachevskii Journal of Mathematics 2014 vol.35 N4, pages 402-408

Integral estimates for derivatives of univalent functions

Kayumov F.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014, Pleiades Publishing, Ltd. Brennan's conjecture for a conformal mapping f of the unit disk is proved under a certain condition on the Taylor coefficients of $\ln f'$. Brennan's conjecture is also proved in the case where $1/f'$ expands into a series of simple fractions absolutely converging to zero. An estimate for the approximation of $1/f'$ by simple fractions is obtained.

<http://dx.doi.org/10.1134/S1995080214040052>

Keywords

approximation by simple fractions, Brennan's conjecture